

## AGC/WSDOT Structures Team Minutes

March 12, 2004

### Members in Attendance

Attendees:	Company	Phone	E-mail
Ayers Scott	Wilder Const.	425-508-3246	<a href="mailto:scottaye@wilderconstruction.com">scottaye@wilderconstruction.com</a>
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Hilmes Bob	WSDOT-ER	509-324-6232	<a href="mailto:Hilmesb@wsdot.wa.gov">Hilmesb@wsdot.wa.gov</a>
Kapur Jugesh	WSDOT_HQ	360-705-7209	<a href="mailto:kapurju@wsdot.wa.gov">kapurju@wsdot.wa.gov</a>
Leachman Dan	Kiewit Const.	425-255-8333	<a href="mailto:dLeachman@kiewit-PBD.com">dLeachman@kiewit-PBD.com</a>
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McCoy Charlie	Atkinson Const.	425-255-7551	<a href="mailto:cmcco@Atkn.com">cmcco@Atkn.com</a>
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Owings Don	WSDOT-SWR	360-905-1501	<a href="mailto:owingsd@wsdot.wa.gov">owingsd@wsdot.wa.gov</a>
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Smith Tobin	Max J. Kuney	509-535-0651	<a href="mailto:tobin@maxkuney.com">tobin@maxkuney.com</a>

The meeting began at 9:00 AM. Feb 12, 04 meeting notes were reviewed and approved without any changes. Others attending the meeting:

Jim Schettler	Jacobs Civil
Mark Hammer	WSDOT
Chuck Olney	Rainer Steel
Kevin Korstar	Apex Steel

### **Steel Price Escalation**

Discussions surrounding price escalation for steel products continued. Some highlights of discussions:

- Graham steel is losing \$200 /Ton on the NE 8<sup>th</sup> contract
- Harris Steel is projecting end of summer shortages
- Price quotes for rebars are good for 48 hrs.
- Steel suppliers are putting escalation clauses in their contracts

Mo suggested that all concerns be sent to AGC and Kevin Dayton. He also reported that steel price concerns would be discussed at the AGC/WSDOT lead team today. The Department will announce a decision following the meeting.

**Action Plan:** Mo will inform members of any upcoming decisions made by WSDOT.

### **Alternate Stirrup Details for Prestressed Girders**

Charlie invited representatives of the ironworkers industry, Chuck Olney of Rainier Steel and Kevin Korster of Apex Steel to provide the team with feedback regarding preferred stirrup details. Kevin indicated that the current practice with straight rebars posed some safety concerns in the field. He mentioned that although the height variances in the new deck ties and placement of them may be labor intensive, but the proposed scheme allows for higher tolerances and field adjustments. Both, Kevin and Chuck expressed their preference for option “2A” in the handout provided the horizontal bar under the stirrup loop would be deleted. Jugesh expressed that deletion of this bar may be feasible. Other improvements to the proposed detail:

- Define the minimum lap length between the stirrup and the field ties
- If the horizontal bar under the stirrup loop is needed, detail the min. clearance from top of the girder
- Do the field ties need to be fastened to the girder stirrups.
- Can a similar detail for stirrups be devised for the precast and cip boxes?

The team suggested that this scheme be tried on a pilot project before it is implemented. Charlie asked the attending ironworkers to bring any other suggestions for improvements to the team for consideration.

**Action Plan:** Ryan Olson and Dan Leachman agreed to look into possibility of trying this scheme on their current Contracts, Highline canal and Hood Canal. Jugesh will update the girder details based on the above suggestions and look into possibility of extending the application of stirrup scheme for precast and cip box girders. The team will seek input from the fabricators at the next meeting.

### **Excavation Type For Soldier Pile & Soil Nail Walls**

Mo presented a question from the ADSC/WSDOT team concerning the preferred type of excavation type in front of soldier and soil nail walls and handed out the payment specifications. The Drillers questioned whether the “roadway excavation” for placement of lagging or shotcreting should be changed to “structural excavation”? The response from the group was no. However, a clarifying language stating that excavation for lagging would be incidental to the unit price for wall construction in the Specs would be advisable.

**Action Plan:** Mo will suggest a better language in the Specs covering excavation for lagging. No further discussions will be needed.

### **Estimating Strength of concrete by Maturity Method for Release of Formwork and falsework**

Mo informed the team of the WSDOT's draft guidelines for acceptance of MM results for release of form and falsework. Dan Leachman mentioned that in a recent study the field-cured cylinders showed up to 25% less strength than the cored samples. However, the MM results correlated within 2% to the strengths obtained by core samples. He also handed out comments on the draft guides to the members.

**Action plan:** Mo will be updating the draft guides based on comments received and will inform the team of the final acceptance guidelines.

### **Vibration Limits**

Jim Schettler gave a presentation based on his literature research of past studies on this topic. His presentation was based on 5 research studies out of 24 references he has found.

**Action Plan:** Jim will continue his research and will discuss further findings at the next meeting.

### **Evaluation of the 14 days Wait Period Before Backfilling Retaining Walls. Std. Specs. 2.09.3(1)E- Discussion topic #27**

The team discussed the requirements of this Specification and its application to retaining walls, abutment walls, wingwalls, and curtain walls. The general concern with the 14-day waiting requirement is with respect to wall creep. Questions concerning wall height limits that this concern is valid and whether further parametric studies finding critical wall heights is warranted were asked.

**Action Plan:** Jugesh will conduct an in-house parametric study to find the effects of creep based on different wall heights for the next meeting.

The meeting adjourned at 12:00 PM

**Next meeting is on May 7, 04**